DWR Climate News Digest

November 15th, 2013-January 4th, 2014



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The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

To subscribe to the DWR Climate News listserv and receive notifications when new editions are posted, send an email to: climatechange@water.ca.gov.

TOPICS [Find older items in the Climate News Archive]

<u>Reports</u>

<u>Safeguarding California DRAFT Plan</u> (available for public comment until February 28, 2014)

[California Natural Resources Agency - December 2013]

Abrupt Impacts of Climate Change: Anticipating Surprises

[National Academy of Science - December 2013] (report in brief HERE)

<u>The Emissions Gap Report 2013</u> [United Nations Environment Programme - November 2013] (Is the world on track to meet the 2 degree C target set by the Copenhagen Accord? This report highlights that there is a gap and suggests options for bridging it.)

Nowhere to Run - Big Game Wildlife in a Warming World

[National Wildlife Federation - November 2013]

Published Literature

- Spread in model climate sensitivity traced to atmospheric convective mixing [Nature January 1, 2014]
- <u>Assessing "dangerous climate change": required reduction of carbon emissions to protect</u>

 <u>young people, future generations and nature</u> [PLOS one December 3, 2013]
- <u>Constraints and potentials of future irrigation water availability on agricultural production</u> <u>under climate change</u>

[Proceedings of the National Academy of Sciences - December 2013]

Multimodal assessment of water scarcity under climate change [Proceedings of the National Academy of Sciences - December 2013] ("...global warming of 2°C above present will confront an additional 15% of the global population with a severe decrease in water resources and will increase the number of people living under absolute water scarcity by another 40% compared with the effects of population growth alone")

<u>Coverage bias in the HadCRUT4 temperature series and its impact on recent temperature</u>

<u>trends</u> [Quarterly Journal of the Royal Meteorological Society - November 2013]

Sea-level Rise and other Ocean Impacts

What the past tells us about modern sea-level rise [Science Daily - December 12, 2013]

Has climate change caused a drop-off in a food source crucial to ocean creatures?

[Washington Post - November 25, 2013] (plankton blooms off New England were well below average this year, coinciding with temperatures that are among the warmest on record)

- Ocean acidification: The climate change buffer, but another environmental disaster in the making [Huffington Post November 24, 2013]
- Ocean's carbon dioxide uptake can impair digestion in marine animal [Science Daily November 15, 2013]

Expert assessment: Ocean acidification may increase 170 percent this century [Science Daily - November 13, 2013]

Agriculture/Food Production

British wine benefits as the climate changes [New York Times - December 13. 2013]

General Water Management

Water scarcity escalating due to climate change, report says [The Hill - December 17, 2013]

Lost freshwater may double climate change effects on agriculture

[Science Daily - December 16, 2013]

<u>Watershed Basin Study</u> [US Bureau of Reclamation - December 12, 2013] (the Basin Study addresses water supply and demand projections for the next 50 years and identifies potential climate change impacts to the watershed)

Extreme Weather Events

Storm expert says climate change may have played a big role in Typhoon Haiyan after all [PRI - November 25, 2013]

<u>Typhoon Haiyan's impact felt at United Nations climate change conference in Warsaw</u>
[National Geographic - November 22, 2013]

<u>Tribal Impacts & Traditional Ecological Knowledge</u>

<u>Tribes take the helm in West Coast ocean planning</u> [National Geographic - December 2, 2013]

Wildlife and Ecosystem Impacts

Florida's mangrove forests expand with climate change [Live Science - December 30, 2013]

Global warming: Four degree rise will end vegetation 'carbon sink' research suggests [Science Daily - December 16, 2013]

Rivers and streams release more greenhouse gas than all lakes

[Science Daily - December 9, 2013]

<u>Imperiled mussels may be further harmed by climate change</u> [USGS - December 3, 2013]

How climate change is helping invasive species take over [Smithsonian - December 2013]

Climate change may disrupt butterfly flight seasons [Science Daily - November 21, 2013]

Climate change making younger birds migrate earlier [Guardian - November 13, 2013]

Greenhouse Gas Mitigation

Draft Greenhouse Gas Methodology for Wetland Restoration

[Restore America's Estuaries - December 2013]

Hack the planet? Geoengineering research, ethics, governance explored

[Science Daily - December 17, 2013]

The Pacific Coast Action Plan on Climate and Energy - will it make a difference?

[Climate Solutions - December 6, 2013] (In November, the Governors of California, Oregon and Washington joined with the Premier of British Columbia to sign an agreement that attempts to fill the void created by a lack of action at the national level to reduce greenhouse gases)

Geoengineering approaches to reduce climate change unlikely to succeed

[Science Daily - December 5, 2013]

Starting then stopping geoengineering could dangerously accelerate climate change

[Scientific American - November 27, 2013]

Stopping a scorcher - The controversy over manipulating climate change

[The Economist - November 23, 2013]

Unavoidable answer for the problem of climate change

[New York Times - November 19, 2013]

Climate Adaptation

A natural capital approach for climate adaptation in Belize [Climate Prep - December 17, 2013]

<u>International Planning</u>

China releases blueprint for adapting to climate change

[Wall Street Journal - December 10, 2013]

Experts to find ways to counter climate change [Times of India - November 25, 2013]

EU (European Union) earmarks one-fifth of budget for climate change efforts

[Business Green - November 20, 2013] ("...climate change will now be integrated into all the main spending areas. This underscores yet again Europe's leadership in the fight against this crucial challenge")

Costa Rica presents climate change action plan [Tico Times - November 19, 2013]

Japan backs off from emissions targets, citing Fukushima disaster

[New York Times - November 15, 2013]

Climate Change Modeling

What is a climate model and how does it work? [AccuWeather - December 3, 2013]

Legislative Updates

<u>Climate change: Carbon market improves in California as offsets are issued, auctions are upheld</u> [Marten Law - December 1, 2013]

Climate change bills in the 113th Congress [The Energy Collective - November 25, 2013]

BLOGS/Commentary

Joe Romm on "The ghost of climate change yet to come"

[Climate Progress - December 24, 2013]

Sara Moore on "Honest conversations about climate change and uncertainty"

[Climate Prep - December 12, 2013]

New York Times Editorial Board on "Sustaining resilience at sea"

[New York Times - December 3, 2013] (new research indicates that marine reserves may enhance the resilience of marine communities in the face of climate change)

Joe Romm on "350 or bust: scientists warn even a 2°C warming leads to 'disastrous consequences' and must be avoided" [Climate Progress - December 3, 2013]

Paul Vogelheim on "Conservatives need to lead on climate change"

[Star Tribune - December 1, 2013]

Tom Steyer on "Climate change: No longer electoral Kryptonite!" [Grist - November 30, 2013]

Stephan Rahmstorf on "Global warming since 1997 underestimated by half"

[Real Climate - November 13, 2013] (when weather station data gaps, especially in the Arctic, are filled using satellite measurements..."the warming trend is more than doubled in the widely used HadCRUT4 data, and the much-discussed 'warming pause' has virtually disappeared")

New York Times Editorial Board on "A new alliance on climate change"

[New York Times - November 13, 2013]

Annie Lowrey on "The inequality of climate change" [New York Times - November 12, 2013]

Additional Items of Interest

[website] <u>California Climate Commons</u> [California Landscape Conservation Cooperative] ("The Climate Commons offers a starting point for discovery about climate change data and related resources, information about the science that produced it, and the opportunity to communicate with others about applying climate change science to conservation in California")

Methane hydrates and global warming [Science Daily - January 2, 2014]

In 1964, Isaac Asimov imagined the world in 2014 [The Atlantic - December 31, 2013]

The eight champions of climate change in the US in 2013 [Guardian - December 30, 2013]

<u>The global temperature jigsaw</u> [Real Climate - December 17, 2013] (the various pieces of the climate puzzle fit together into a coherent picture - one that clearly shows continued global warming in recent years)

Obama and climate change: The real story [Rolling Stone - December 17, 2013]

Recognizing the elephant in the room: Future climate impacts across sectors [Science Daily - December 16, 2013]

The entire IPCC report in 19 illustrated haiku [Sightline Daily - December 16, 2013]

Global warming is unpaused and stuck on fast forward, new research shows
[Guardian - December 10, 2013]

<u>US Navy predicts summer ice free Arctic by 2016</u> [Guardian - December 9, 2013] ("An ongoing US Dept of Energy-backed research project led by a US Navy scientist predicts that the Arctic could lose its summer sea ice as early as 2016- **84 years ahead** of model projections")

Waking up the world to climate change [The Hindu - December 9, 2013]

Nelson Mandela's legacy to climate change activists

[Responding to Climate Change - December 6, 2013]

Rapid climate changes at end of last glaciation, but with 120 year time lag

[Science Daily - December 4, 2013]

Warsaw climate talks end with foundation for a global agreement

[Center for American Progress - December 4, 2013]

<u>How Bloomberg's new financial tool helps investors game out the risks of the carbon bubble</u> [Climate Progress - December 3, 2013]

How fast is the Earth's climate actually changing? [USA Today - December 3, 2013] (A new National Research Council report concludes that "two abrupt impacts that can be definitively linked to climate change are a rapid decline in sea ice over the past decade, and increased extinction pressure on plant and animal species")

Obama: Millennials can contribute to climate change fix [Salon - December 1, 2013]

Harvard study shows sprawl threatens water quality, climate protection, and land conservation gains in Massachusetts [Harvard - December 2013]

No climate change deniers to be found in the reinsurance business

[Globe and Mail - November 28, 2013]

DOD (Department of Defense) wraps climate change response into master plans

[U.S. Department of Defense - November 26, 2013] (DOD has over 500 bases, 300,000 buildings and 2.2 billion square feet of space and "the infrastructure has a plant replacement value on the order of \$850 billion...that is all going to be impacted by changes in the climate" says the U.S. acting deputy undersecretary of defense for installations and environment)

Global carbon project updates data on the Carbon Budget

[Energy Innovation - November 26, 2013]

Underestimated future climate change? [Red Orbit - November 25, 2013]

Climate change will make the Arctic a new battleground - Here's how America will fight [Grist - November 25, 2013]

Watch our planet's impending climate disaster unfold from space

[Fast CoExist - November 22, 2013]

Just 90 companies caused two-thirds of man-made global warming emissions

[Guardian - November 20, 2013]

Rich-vs-poor nations' clash stalls work toward 2015 climate pact

[LA Times - November 23, 2013]

Climate change fight getting off track after major global setbacks in Japan and Australia, study finds [Huffington Post - November 20, 2013]

Prince Charles' full speech on deforestation and climate change

[Telegraph - November 20, 2013]

An international deal on climate change is within our reach [Guardian - November 20, 2013]

UN climate change talks in Warsaw hampered by development gap

[Aljazeera America - November 20, 2013]

Man-made climate change mostly due to just 90 companies

[Business Insider - November 20, 2013]

Gender equality progress a bright spot in U.N. climate negotiations

[Climate Progress - November 19, 2013]

Global cooling: When the climate changed astonishingly fast [CNN - November 19, 2013]

Bloomberg's hidden legacy: Climate change and the future of New York City, part 1

[Inside Climate News - November 18, 2013] (read Part 2, Part 3, Part 4, and Part 5))

Rocks hold the truth about climate change [The Telegraph - November 18, 2013]

Impacts of climate change observed in global precipitation patterns

[Ars Technica - November 16, 2013]

Growing clamor about inequities of climate crisis [New York Times - November 16, 2013]

One senator's lonely war against climate change [Washington Post - November 15, 2013]

(Senator Sheldon Whitehouse delivers well-researched and impassioned speeches about climate change on the floor of the Senate each week, often to a nearly empty room)

Typhoon reminds us climate change is about people [SF Gate - November 15, 2013]

Environment groups walk out of Warsaw COP19 climate change talks

[DeSmogBlog - November 11, 2013]

<u>Learning how to die in the Anthropocene</u> [New York Times - November 10, 2013]

Wall Street demands answers from fossil fuel producers on 'unburnable carbon'

[Inside Climate News - October 24, 2013]

Climate change: How hot will it get in my lifetime? - interactive

[Guardian - September 27, 2013] (an interactive tool uses new IPCC projections to help visualize what the numbers mean within an individual's lifetime)

Images to Ponder

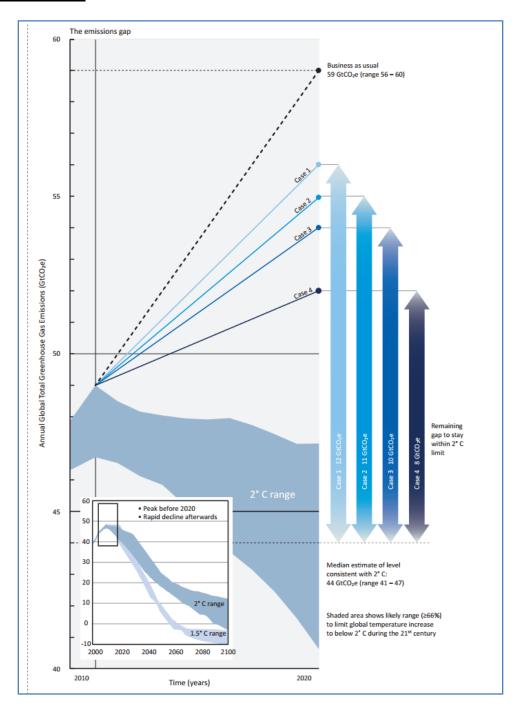


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